



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/104,947	06/25/98	FORBORD	K I169.12-0314

WM21/0702
SHAWN B. DEMPSTER , SEAGATE TECHNOLOGY L
INTELLECTUAL PROPERTY DEPT SHK2LG
1280 DISC DRIVE
SHAKOPEE, MN 55379-1863

EXAMINER	
KLIMOWICZ, W	
ART UNIT	PAPER NUMBER

2652

17

DATE MAILED: 07/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/104,947

Applicant(s)

FORBORD, KENT J.

Examiner

William J. Klimowicz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 8-10 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-14 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Claim Status

Claims 1-20 are currently pending.

Claims 8-10 and 15-17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected species.

Claims 1-7, 11-14 and 18-20 have been treated on the merits, *infra*.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7, 11-14 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 (line 2) and 3 (line 2), the recitation of the phrase "a standard configuration" is vague and indefinite. More concretely, disk drive "standards" are subject to not only changes over time, but are subjective. For instance, a leader in the disk drive industry can force the competition to accept its defined "standard" by its overwhelming market share. The metes and bounds of the claims cannot in any way provide the public with ample notification to what is and may possibly be covered. The scope of the claim cannot be readily ascertained, to any reasonable objective degree. As contrasted with a standard of measurement (e.g., time measured in seconds, minutes, hours, etc.), disk drive "standards" are not universal and are continually changing to meet the trend toward smaller disk drives.

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Similarly for the reasons set forth, *supra*, claims in claims 1 (line 5-6) and 3 (line 6 and line 8-9), the phrase “the standard configuration” is vague and indefinite.

With regard to claim 3 (lines 5-6), the phrase “smaller than a diameter of a rigid disc associated with the standard configuration” is completely nebulous. How is this “association” defined, and who defines it? The language is completely subjective and cannot in any way define the metes and bounds of the claim in a “definite” manner as prescribed by the 35 USC 112 second paragraph.

With regard to claim 3 (lines 7-9), the phrase “the number of discs ordinarily contained in the standard configuration” is vague and indefinite. Who decides what is to be considered “ordinarily contained” as opposed to *not* “ordinarily contained”? The phrase provides absolutely no definiteness whatsoever.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 11-14 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishida et al (U.S. Patent 5,189,577) in view of Best et al (U.S. Statutory Invention Registration H1221).

With regard to claims 1 and 2, Nishida et al shows a disk drive assembly including: a disk drive housing having an external three-dimensional configuration matching a 3 1/2 inch external

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three-dimensional configuration; and a disk drive supported in the housing having a stack of rotatable rigid recording discs; and a head/actuator assembly for reading data to and writing data from selected ones of the discs. Nishida et al does not show the disk diameter.

Best et al shows that it is known in the art to have disks with a 65 mm diameter.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the disk drive of Nishida et al with disks having a diameter of 65 mm as taught by Best et al. The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to provide the disk drive of Nishida et al with disks having a diameter of 65 mm as taught by Best et al since it reduces access times by having shorter distances over which the heads must traverse. Additionally, reducing the disk diameters allows more space inside of the disk drive for the other disk drive components. This concept is well known established and readily appreciated by one having ordinary skill in the art.

With regard to claims 3, 4, 11 and 18, Nishida et al further shows that the number of disks is six.

With regard to claims 5, 7, 13 and 20, Nishida et al does not show the speed of the spindle motor.

Best et al, on the other hand, teaches a spindle motor that rotates at 10,000 rpm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the disk drive of Nishida et al with a spindle motor that rotates at 10,000 rpm as taught by Best et al. The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to provide the disk drive of Nishida et al with a spindle

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motor that rotates at 10,000 rpm as taught by Best et al so that latency is reduced. This concept is well known established and readily appreciated by one having ordinary skill in the art.

With regard to claims 6, 12, 14 and 19, Nishida et al in view of Best et al show all the features except for the disk having a diameter of 84 mm. A 3 1/2 inch disk usually has a diameter of 95 mm. Best et al teaches a disk having a diameter of 65 mm. This shows that it was possible at the time the invention was made to make the disk 84 mm. Furthermore, Official Notice is taken that disks of 84 mm are known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the disks have a diameter of 84 mm through routine experimentation and optimization in the absence of criticality. The concept of reducing disk size is well known established and readily appreciated by one having ordinary skill in the art. Why is 84 mm better than 83 mm, or 65 mm for that matter?

Response to Arguments

Applicant's arguments filed April 23, 2001 (paper No. 16) have been fully considered but they are not persuasive. The Declaration under 37 CFR 1.132 filed on September 14, 1999 is insufficient to overcome the rejection of claims 1-7, 11-14 and 18-20 based upon Nishida et al in view of Best et al because, *inter alia*, there is no showing that the claimed features were responsible for the commercial success.

The claims of the instant application are not claiming a new structure or relationship of structure that *allows* for a disk drive to have a smaller disk size, but are, in essence, attempting to patent a new standard disk size, without regard to structure of the relationship of internal drive that would in anyway define over the art. The only claimed difference is size. The Examiner

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maintains that, as presently claimed, a new claimed standard size without regard as to how the Applicants were able to arrive at it absent of structure and/or the relationship of such structure, does not warrant the grant of a utility patent.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (703) 305-3452. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

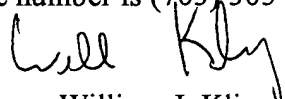
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


William J. Klimowicz
Primary Examiner
Art Unit 2652

WJK
June 29, 2001